

## **LISTING OF CLAIMS**

Claims 1-24. (Canceled)

- 25. (Currently Amended) A method for delivering a biologically active substance to antigen-presenting cells comprising the steps of:
- a) covalently coupling said <u>biologically</u> active substance to the OmpA protein of *Klebsiella pneumoniae* having the amino acid sequence of SEQ ID No. 2; and
- b) contacting said coupled <u>biologically</u> active substance obtained in step a) with said antigen-presenting cells, <u>wherein the coupled biologically active substance is internalized into the antigen-presenting cells.</u>
- 26. (Canceled)
- 27. (Previously Presented) The method of claim 25, wherein said antigen-presenting cells are chosen from dendritic cells, monocytes and B lymphocytes.
- 28. (Previously Presented) The method of claim 27, wherein said antigen-presenting cells are dendritic cells.
- 29. (Canceled)
- 30. (Canceled)
- 31. (Previously presented) The method of claim 25, wherein said OmpA protein of *Klebsiella pneumoniae* is a recombinant protein.
- 32. (Canceled)
- 33. (Canceled)

34. (Canceled)

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35. (Previously Presented) The method of claim 25, wherein the

covalent coupling is chemical coupling.

36. (Previously Presented) The method of claim 35, wherein one or

more attachment elements are introduced into said OmpA protein of

Klebsiella pneumoniae, in order to facilitate the chemical coupling.

37. (Previously presented) The method of claim 36, wherein said

attachment element is an amino acid.

38. (Currently Amended) The method of claim 25, wherein said

biologically active substance covalently coupled with said OmpA protein, is

a recombinant chimeric protein resulting from the expression of a nucleic

acid construct encoding said biologically active substance and said OmpA

protein.

39. (Currently Amended) The method of claim 25, wherein said

biologically active substance is an antigen or a hapten.

40. (Withdrawn) A method for modifying the immune response to an

antigen or a hapten with a composition intended for specific targeting of a

biologically active substance, which is associated with it, to antigen-

presenting cells, wherein an enterobacterium OmpA protein, or a fragment

thereof, is internalized into the antigen-presenting cells.

41. (Withdrawn) The method of claim 40 for improving the immune

response to an antigen or a hapten.

42. (Withdrawn) The method of claim 40 for preventing or treating a

disease.

43. (Withdrawn) The method of claim 42, for preventing or treating a disease with an active substance, the effectiveness of which is modified by and/or linked to the internalization thereof by dendritic cells.

44. (Withdrawn) The method of claim 43, for preventing or treating cancers, preferably cancers associated with a tumor antigen, autoimmune diseases, allergies, graft rejections, cardiovascular diseases, diseases of the central nervous system, inflammatory diseases, infectious diseases or diseases linked to an immunodeficiency.

45. (Withdrawn) The method of claim 44, for preventing or treating an infectious disease or a cancer associated with a tumor antigen.

46. (Withdrawn) A pharmaceutical composition effective in the method of claim 42 which comprises an adjuvant of immunity.

47. (Withdrawn) The pharmaceutical composition of claim 46 which is vehicled in a form which makes it possible to improve the stability and/or immunogenicity thereof.

48. (Withdrawn) The pharmaceutical composition of claim 46 which is vehicled in the form of a liposome, of a viral vector, or of a transformed host cell capable of expressing a recombinant chimeric protein resulting from the expression of a nucleic acid construct encoding said biologically active substance and said OmpA protein, or a fragment thereof.